IN THE CLAIMS:

1. (Currently amended) A solid oxide fuel cell comprising:

an anode including a first portion of doped-ceria, wherein said first portion of doped-ceria is deposited by colloidal spray deposition;

an electrolyte including a second portion of doped-ceria; and

a cathode including at least one cobalt iron manganese based ~~materials~~ material, wherein said fuel cell is capable of operating in the temperature range of 400-700°C.

2. (Previously presented) The fuel cell of Claim 1, wherein said anode comprises NiO and doped-ceria.

3. (Currently amended) The fuel cell of Claim 1, wherein said first portion of doped-ceria is doped with at least one ~~dopants~~ dopant selected from the group consisting of samarium oxide, gadolinium oxide, yttria oxide, and lanthanide oxide.

4. (Currently amended) The fuel cell of Claim 1, wherein said anode~~, said electrolyte, and said cathode are~~ is porous.

5. (Canceled)

6. (Previously presented) The fuel cell of Claim 1, wherein said electrolyte comprises material selected from the group consisting of doped-ceria, doped-zirconia with a thin layer of doped-ceria, and a mixture of doped-ceria and doped-zirconia.

7. (Previously presented) The fuel cell of Claim 1, wherein said cathode is selected from the group consisting of (La, Sr)(Co, Fe) O_3, and (La, Ca) (Co, Fe, Mn)O_3.

8-11. Canceled

12. (Currently amended) A ceria-based solid oxide fuel cell comprising:

an anode containing first portion of doped-ceria, wherein said first portion of doped-ceria is deposited by colloidal spray deposition;

an electrolyte containing a second portion of doped-ceria;

an electrode containing cobalt iron manganese based ~~materials~~ material; and a fuel selected from the group consisting of hydrogen, methane, methanol, propane, butane and other hydrocarbons.

13. (Original) The fuel cell of Claim 12, operating in a temperature range of 400-700°C.

14. (Original) The fuel cell of Claim 12, wherein said fuel is composed of hydrogen or methane, and wherein the operating temperature is about 550°C.

15. (Previously presented) The fuel cell of Claim 12, wherein said fuel is hydrogen, and said fuel cell has a power output of up to 400mW/cm^2 at an operating temperature of 550°C.

16. (Previously presented) The fuel cell of Claim 12, wherein said fuel is methane, and said fuel cell has a power output of 320mW/cm^2 at an operating temperature of 500°C.

17. (Previously presented) The fuel cell of Claim 12, wherein said anode comprises NiO and doped-ceria.

18. (Original) The fuel cell of Claim 17, wherein said electrolyte additionally includes doped-zirconia.

19. (Previously presented) The fuel cell of Claim 18, wherein said electrode is selected from the group consisting of (La, Sr) (Co, Fe)O_3 and (La, Ca) (Co, Fe, Mn) O_3.

20. (Currently amended) The fuel cell of Claim 19, wherein said first portion of doped-ceria is doped with samarium oxide or gadolinium oxide.